

ABSTRACT

The HDEIT method of the present invention permits one to use a variety of such indices to distinguish a tumour from normal surrounding tissue because it produces the value of the tissue characteristic at each zone in the tissues measured in accordance with the applied frequency. The tumour distinguishing analysis may be applied to the HDEIT image, or may be applied to the data that comprise the image without generating the image. Such methods are intended to permit the detection of tumors that are too small to be accurately seen in an image, but produce a large enough index for diagnostic purposes. One can apply this capability of the HDEIT method in a number of ways. For example, one can quickly scan the breast at low resolution, perform a distinguishing analysis for tumors, and then only perform a longer-duration high resolution scan if there was an indication of a diagnostically significant area to be examined.